

REMARKS

Claims 13-23, 35-40, 46-49, 59-67 were examined. Claims 1-12, 24-34, 41-45, 50-58 and 68-72 were canceled pursuant a restriction requirement. Claims 13, 15, 20, 35, 38-40, and 48 are amended. Claims 1-12, 14, 24-34, 41-45, 50-58, and 68-72 are canceled. Applicants herein reserve the right to pursue claims of similar scope of all of the originally filed claims in other divisional, continuation, or continuation-in-part patent applications. Examination and reconsideration of all pending claims are respectfully requested.

Claim Rejections

Claims 13, 16, 17 and 21 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Higgins III (U.S. Patent No. 5,639,989). Such rejections are overcome as follows.

To expedite prosecution, Applicants have incorporated the subject matter of claim 14 into independent claim 13. Amended claim 13 recites a method of EMI shielding a circuit board or flexible circuitry. The method comprises encapsulating an electronic component with a conforming insulating base coating. A first conductive layer is vacuum metallized over the insulating base coating. The conductive layer is grounded to a ground trace to form an EMI shield for the electronic component. The cited art does not describe or suggest such a combination.

The Examiner recognized that Higgins does not describe vacuum metallizing and relied on DiLeo (U.S. Patent No. 5,968,600) to reject the "vacuum metallizing" limitation of the original claim 14. However, DiLeo states in its specification at col. 1, lines 26-27:

"Vacuum metallizing is another alternative, **but that method is unsuitable for volume production of electronic enclosures.**" (emphasis added)

ORTIZ, Al et al.  
Application No.: 09/788,263  
Page 7

It is well settled that in order to establish a *prima facie* case of obviousness under 35 U.S.C. *inter alia* there must be some suggestion or motivation to one of ordinary skill in the art to make the combination. See MPEP § 2143.01. As shown by the above paragraph, DiLeo appears to teach away from vacuum metallizing. In particular, the remainder of the DiLeo specification describes an aqueous-based EMI shielding coating composition that may be sprayed onto plastic (col. 1, lines 62 to col. 2, line 24).

Because the background of DiLeo appears to teach away from vacuum metallization and the remainder of the specification describes other methods, a person of ordinary skill in the art would not have the motivation or suggestion to combine DiLeo with Higgins to come to the method recited in amended claim 13. Consequently, amended independent claim 13 is allowable over the cited art. For at least the same reasons, dependent claims 15-23 are also allowable over the cited art.

Claim 35 was rejected as allegedly being anticipated by Gabower. Claims 36-40, 46-49 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gabower in view of Denzene (U.S. Patent No. 6,219,258). Such rejections are overcome in part and traversed in part as follows.

To highlight the novel aspects of the present invention and to expedite prosecution, Applicants have amended claim 35 to incorporate the subject matter of claims 36 and 37. Amended independent claim 35 recites a method of shielding electronic components. The method comprises thermoforming a plurality of compartments into a thermoformable article. A conductive layer is vacuum metallized onto the thermoformed article. The vacuum metallized thermoformed article is attached to a ground trace on a circuit board to form a grounded shield by coupling a conductive adhesive between the metallized thermoform article and the ground trace.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the cited references must describe or suggest every element of the claim and provide some suggestion or motivation to combine the references. See MPEP § 2143. The Examiner has not shown where the cited references describe each of the elements of

claim 35. Instead, the Examiner simply stated that "[i]t would have been an obvious matter of design choice to use a conductive adhesive to bond the ground trace to the thermoform, since applicant has not disclosed that using an adhesive solves any state problem or is for any particular purpose...."

The response to the Examiner's comments is in two parts:

(1) First, the Examiner has not shown where the references describe or suggest a coupling a conductive adhesive between the thermoformed article and the ground trace. The Examiner has not shown where Gabower or Denzene describe or suggest a attaching the vacuum metallized thermoform to a ground trace by coupling a conductive adhesive between the thermoformed article and the ground trace. In contrast to the claimed method, Denzene merely describes providing a EMI shield card module 20 that includes a housing 30 that has a cover 32 (col. 4, lines 65-67). As described in col. 5, lines 15-32, "[t]he base 34 includes tapered screw holes 35 at each corner that correspond with screw holes 38 of the cover...these additional screw holes 35 and/or embossments may be used for alignment of the circuit board assembly 70, or simply for additional fastening points to insure proper mating. Of course there should be corresponding screw holes 38 in cover 32." The Examiner has not shown where there is any description or suggestion in either reference of using a conductive adhesive.

(2) Second, Applicants submit that there is no requirement under 35 U.S.C. § 103(a) to show that the elements of the claims "solves any stated problem or is for any particular purpose." Applicants respectfully request the Examiner to show where 35 U.S.C. § 103(a) requires such a showing.

Instead, as noted above, per MPEP § 2143, to establish a *prima facie* case of obviousness the Examiner must show where the cited art describes every element and that there is a suggestion or motivation to combine the references. As noted above, the Examiner has not met the requirements under MPEP § 2143. If the Examiner maintains his rejections, Applicants respectfully request that the Examiner show where the cited references show each element of the claim. Absence such a showing by the Examiner, the amended claim 35 is allowable over the cited references.

Claims 59-66 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lacey (U.S. Patent No. 6,271,465) in view of Askew (U.S. Patent No. 6,350,951). Claim 67 is rejected as being unpatentable over Lacey in view of Gabower. Such rejections are traversed as follows.

Originally filed claim 59 recites a method of shielding an electronic component. The method comprises attaching a base portion of a metallized substrate to the ground trace surrounding the electronic component. A top portion of a metallized substrate is removably coupled to the base portion to cover the electronic component.

The cited art fails to describe or suggest a method that comprises removably coupling a top portion of a metallized substrate to a base portion. As noted above, it is well established that in order to establish a *prima facie* case of obviousness, the prior art references must teach or suggest all the claim limitations. See MPEP § 2143.03.

Lacey illustrates in Figure 1 a one-piece shield 14. Moreover, Askew merely shows removing a top portion of a cover to expose electrical components. The Askew cover is not a top portion of a metallized substrate, nor is it removably coupled to a base portion that is attached to a ground trace surrounding the electronic component. For at least these reasons, independent claim 59 is allowable over the cited art. For at least the same reasons, dependent claims 60-67 are also allowable over the cited art.

#### Dependent Claims

As noted above, the pending claims are allowable at least for depending from an allowable independent claim. Moreover, the dependent claims recited novel features not described or suggested by the cited art.

For example, dependent claim 61 recites that the top portion overlaps the bottom portion. Claim 62 recites that the top portion overlaps the bottom portion over a periphery of the bottom portion. Claim 63 recites positioning protrusions between a periphery of the top portion and the bottom portion of the EMI shield. Claim 64 states that the protrusions are spaced no larger than one-half a wavelength of electromagnetic

radiation emitted from the component. Claim 65 recites inserting a tab in a groove. None of the elements are described or suggested in the cited reference.

The Examiner merely stated that "it would have been an obvious matter of design choice to overlap the top and bottom portions, space protrusions less than one-half a wavelength apart, and insert a tab into a groove of the bottom portion... and that such limitations do not solve any state problem or is for any particular purpose."

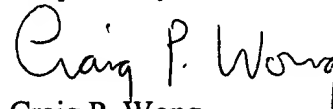
Applicants strongly disagree with the Examiner's statements. As noted above, the test for obviousness under 35 U.S.C. § 103(a) is that the references must disclose every element of the claim and there must be a suggestion or motivation to combine the references. See MPEP § 2143. The Examiner has not shown either of these requirements. There is no requirement under 35 U.S.C. § 103(a) that the limitations solve a problem or is for any particular purpose. For at least these reasons, each of the dependent claims are allowable. If the Examiner maintains his rejections over the claims, Applicants respectfully request that the Examiner show where each of the elements are illustrated in the cited references.

#### CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Craig P. Wong  
Reg. No. 45,231